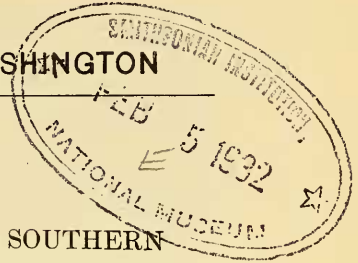


PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTONTWO NEW FOXES FROM THE SOUTHERN  
CALIFORNIAN ISLANDS.

BY J. GRINNELL AND J. M. LINSDALE.

Specimens of the foxes found on several of the Santa Barbara Islands off the coast of southern California have been assembled by us from the various collections on the west coast in order to study the systematic relationships existing within the whole group. This group, we conclude from our study, is properly to be covered under the one specific name, *Urocyon littoralis* (Baird). The specimens gathered together include, as of importance in the present connection, one lot of twenty collected on Santa Rosa Island, in 1927, and one lot of nineteen collected on San Nicolas Island, in 1929 and 1930. Study of these quite sufficient series proves the propriety of considering the animals from each of these two islands a race distinct from all the other forms of island fox. Mr. Donald R. Dickey, to whose collection both series belong, has courteously granted us the privilege of describing these new foxes on the basis of his material.

In view of his vigorous and intelligently conducted quest of the materials here concerned (and likely never to be duplicated), it has seemed to us most appropriate that Mr. Dickey's name be permanently of record in the nomenclature of the island foxes. It is also to be said here that Mr. Dickey had himself planned to name these new forms but later decided to turn the material over to us. These circumstances account for the selection of the name proposed for the well-marked San Nicolas animal.

***Urocyon littoralis santarosae*, new subspecies.**

SANTA ROSA ISLAND FOX.

*Type*.—Male (adult skin and skull), no. 13407, coll. Donald R. Dickey; Santa Rosa Island, Santa Barbara County, California; November 8, 1927; collected by H. H. Sheldon.

*Diagnosis*.—Coloration intermediate between that of foxes of San Miguel (subspecies *littoralis*) and of Santa Cruz (subspecies *santacruzae*) islands, but nearer the average for those of Santa Cruz Island. Distinguished from San Miguel Island foxes by having a conspicuously longer tail. Cranially nearest to San Miguel Island foxes, but showing tendencies toward the race on Santa Cruz Island in the following characters. Compared with *littoralis* the present race has the basioccipital narrower, upper carnassial teeth averaging smaller and narrower, and nasals more nearly parallel sided (rather than markedly "hour-glass" shaped) and more sharply pointed posteriorly.

*Material*.—Twenty skins-with-skulls or skulls-only in the collection of Donald R. Dickey; one skin-with-skeleton, two skulls-only, and two skeletons, in the Museum of Vertebrate Zoology.

*Distribution*.—Santa Rosa Island, Santa Barbara County, California.

*Measurements of Type*.—Dimensions, in millimeters, taken by the collector, are as follows. Total length, 741; tail vertebrae, 245; hind foot, 115. Skull dimensions are: greatest length, 105; condylobasal length, 102; basilar length, 93.4; palatilar length, 50.1; zygomatic breadth, 58.8; mastoid breadth, 39.6; breadth across postorbital processes, 33.7; interorbital width, 20.9; width of rostrum, 17.7; height of brain-case at bullae, 37.5.

***Urocyon littoralis dickeyi*, new subspecies.**

SAN NICOLAS ISLAND FOX.

*Type*.—Male (adult skin and skull), no. 15496, coll. Donald R. Dickey; San Nicolas Island, Ventura County, California; May 6, 1929; collected by H. H. Sheldon.

*Diagnosis*.—Coloration close to that of foxes from San Clemente Island. Compared with the race *clementae*, skins from San Nicolas Island have slightly darker coloration on the head; but all those from San Nicolas lack the added rufous color, especially on the side of the head, which is a distinctive feature of *clementae*. The present race has the strip of dark gray beneath the eye abruptly joined below by white, there being no trace of the intervening border of clear rufous shown on specimens of *clementae*.

Skulls of *dickeyi* look much like those from Santa Cruz Island. From these they differ in having the brain-case apparently more inflated; foramen magnum, in the series, averaging rounder; nasals projecting farther back than posterior edges of maxillaries; nasals more nearly parallel sided, with posterior ends obliquely truncate; palatines considerably shorter; basioccipital narrower; upper carnassial teeth slightly heavier. Compared with *clementae* the San Nicolas Island skulls have shorter palatines, narrower basioccipitals, narrower and lighter upper carnassial

teeth, and posterior margin of basioccipital sharply V-shaped rather than shallowly U-shaped. The most marked difference is in the nasals which in *dickeyi* project only one-half as far beyond a line passing through the posterior points on the maxillaries as do those of *clementae*.

*Material*.—Eighteen skins-with-skulls and one skin-only in the collection of Donald R. Dickey.

*Distribution*.—San Nicolas Island, Ventura County, California.

*Measurements of Type*.—Dimensions, in millimeters, taken by the collector are as follows. Total length, 730; tail vertebrae, 270; hind foot, 111. Skull dimensions are: Greatest length, 100.2; condylobasal length, 97.2; basilar length, 89.9; palatilar length, 46.7; zygomatic breadth, 57.3; mastoid breadth, 39.5; breadth across postorbital processes, 29.5; interorbital width, 19.5; width of rostrum, 16.9; height of brain-case at bullae, 39.0.